WHAT IS CLAIMED IS:

1. A process of reducing $NO_x$ emissions from the regeneration zone during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components, said process comprising

a) contacting a hydrocarbon feedstock during a fluid catalytic cracking (FCC) process wherein $NO_x$ emissions are released from a regeneration zone of a fluid catalytic cracking unit (FCCU) operating under FCC conditions with a circulating inventory of an FCC cracking catalyst and a particulate $NO_x$ reduction catalyst/additive composition having a mean particle size of greater than 45 μm and comprising (i) at least 10 weight percent of a $NO_x$ reduction zeolite component selected from the group consisting of ZSM-11, beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, MCM-35, MCM-61, Offretite, A, ZSM-12, ZSM-23, ZSM-18, ZSM-22, ZSM-57, ZSM-61, ZK-5, NaJ, Nu-87, Cit-1, SSZ-35, SSZ-48, SSZ-44, SSZ-23, Dachiardite, Merlinoite, Lovdarite, Levyne, Laumontite, Epistilbite, Gmelonite, Gismondine, Cancrinite, Brewsterite, Stilbite, Paulingite, Goosecreekite, Natrolite, omega or mixtures thereof , and (ii) from about 5 to about 50 weight percent of an inorganic binder selected from the group consisting of alumina, silica, silica alumina, alumina phosphate and mixtures thereof; and

b) reducing the amount of $NO_x$ emissions released from the regeneration zone of the FCCU by at least 10% as compared to the amount of $NO_x$ emissions released in the absence of the particulate $NO_x$ reduction composition.

2. The process of Claim 1 wherein the FCC cracking catalyst comprises a Y-type zeolite.

3. The process of Claim 1 wherein step (b) is accomplished without a substantial reduction in the hydrocarbon feedstock conversion or yield of cracked hydrocarbons as compared to the hydrocarbon feedstock conversion or yield of cracked hydrocarbons obtained from the cracking catalyst alone.

4. The process of Claim 3 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 30 weight percent of the composition.

5. The process of Claim 4 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 40 weight percent of the composition.

6. The process of Claim 5 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 50 weight percent of the composition.

7. The process of Claim 3 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 10 to about 85 weight percent of the composition.

8. The process of Claim 7 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 30 to about 80 weight percent of the composition.

9. The process of Claim 8 wherein the amount of the $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 40 to about 75 weight percent of the composition.

10. The process of Claim 3 wherein the $NO_x$ reduction zeolite component is exchanged with a cation selected from the group consisting of hydrogen, ammonium, alkali metal and combinations thereof.

11. The process of Claim 3 wherein the $NO_x$ reduction zeolite component further comprises at least one stabilizing metal.

12. The process of Claim 11 wherein the stabilizing metal is a metal selected from the group consisting of Groups 2A, 3B, 4B, 5B, 6B, 7B, 8B, 2B, 3A, 4A, 5A, and the Lanthanide Series of The Periodic Table, Ag and mixtures thereof.

13. The process of Claim 12 wherein the stabilizing metal is selected from the group consisting of Groups 3B, 2A, 2B, 3A and the Lanthanide Series of the Periodic Table, and mixtures thereof.

14. The process of Claim 13 wherein the stabilizing metal is selected from the group consisting of lanthanum, aluminum, magnesium and zinc, and mixtures thereof.

15. The process of Claims 11 wherein the stabilizing metal is incorporated into the pores of the $NO_x$ reduction zeolite component.

16. The process of Claim 1 wherein the inorganic binder is selected from the group consisting of silica, alumina, silica alumina and mixtures thereof.

17. The process of Claim 16 wherein the inorganic binder is alumina.

18. The process of Claim 17 wherein the alumina is an acid or base peptized alumina.

19. The process of Claim 17 wherein the alumina is aluminum chlorohydrol.

20. The process of Claim 3 wherein the amount of inorganic binder present in the particulate catalyst/additive composition ranges from about 10 to about 30 weight percent of the composition.

21. The process of Claim 20 wherein the amount of inorganic binder present in the particulate catalyst/additive composition ranges from about 15 to about 25 weight percent of the composition.

22. The process of Claim 1 wherein the $NO_x$ reduction zeolite component has a $SiO_2$ to $Al_2O_3$ molar ratio of less than 500.

23. The process of Claim 1 wherein the NOx reduction zeolite component is a zeolite selected from the group consisting of beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, Offretite, A, ZSM-12, ZSM-23, omega and mixtures thereof.

24. The process of Claim 3 wherein the particulate catalyst/additive composition further comprises an additional zeolite other than the NOx reduction zeolite.

25. The process of claim 24 wherein the additional zeolite is selected from the group consisting of ferrierite, ZSM-5, ZSM-35 and mixtures thereof.

26. The process of Claim 24 or 25 wherein the additional zeolite is present in an amount ranging from about 1 to about 80 weight percent of the composition.

27. The process of Claim 26 wherein the additional zeolite is present in an amount ranging from about 10 to about 70 weight percent of the composition.

28. The process of Claim 1 or 3 wherein the catalyst/additive composition further comprises a matrix material selected from the group consisting of alumina, silica, silica alumina, titania, zirconia, yttria, lanthana, ceria, neodymia, samaria, europia, gadolinia, praseodymia, and mixtures thereof.

29. The process of Claim 28 wherein the matrix material is present in an amount less than 70 weight percent.

30. The process of Claim 3 further comprising recovering the cracking catalyst from said contacting step and treating the used catalyst in a regeneration zone to regenerate said catalyst.

31. The process of Claim 30 wherein the cracking catalyst and the particulate catalyst/additive composition are fluidized during contacting said hydrocarbon feedstock.

32. The process of Claim 3 further comprising contacting the hydrocarbon feed with at least one additional $NO_x$ reduction composition.

33. The process of Claim 32 wherein the additional $NO_x$ reduction composition is a non-zeolitic composition.

34. The process of Claim 33 wherein the additional $NO_x$ reduction composition comprises (1) an acidic metal oxide containing substantially no zeolite; (2) a metal component, measured as the oxide, selected from the group consisting of an alkali metal, an alkaline earth metal and mixtures thereof; (3) an oxygen storage metal oxide component; and (4) at least one noble metal component.

35. The process of Claim 32 wherein the additional $NO_x$ reduction composition is a low $NO_x$, CO combustion promoter composition which comprises (1) an acidic oxide support; (2) an alkali metal and/or alkaline earth metal or mixtures thereof; (3) a transition metal oxide having oxygen storage capability; and (4) palladium.

36. The process of Claim 32 wherein the additional $NO_x$ reduction composition comprises (1) an acidic oxide support; (2) an alkali metal and/or alkaline earth metal or mixtures thereof; (3) a transition metal oxide having oxygen storage capability; and (4) a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

37. The process of Claim 32 wherein the additional $NO_x$ reduction composition comprises at least one metal-containing spinel which includes a first metal and a second metal having a valence higher than the valence of said first metal, at least one component of a third metal other than said first and second metals and at least one component of a fourth metal other than said first, second and third metals, wherein said third metal is

selected from the group consisting of Group IB metals, Group IIB metals, Group VIA metals, the rare-earth metals, the Platinum Group metals and mixtures thereof, and said fourth metal is selected from the group consisting of iron, nickel, titanium, chromium, manganese, cobalt, germanium, tin, bismuth, molybdenum, antimony, vanadium and mixtures thereof.

38. The process of Claim 37 wherein the metal containing spinel comprises magnesium as said first metal and aluminum as said second metal.

39. The process of Claim 38 wherein the third metal component in the metal containing spinel is selected from the group consisting of a Platinum Group metal, the rare-earth metals and mixtures thereof.

40. The process of Claim 39 wherein the third metal component is present in an amount in the range of about 0.001 to about 20 weight percent, calculated as elemental third metal.

41. The process of Claim 40 wherein said fourth metal component is present in an amount in the range of about 0.001 to about 10 weight percent, calculated as elemental fourth metal.

42. The process of Claim 32 wherein the additional $NO_x$ reduction additive is a zinc based catalyst.

43. The process of Claim 32 wherein the additional $NO_x$ reduction additive is an antimony based $NO_x$ reduction additive.

44. The process of Claim 32 wherein the additional $NO_x$ reduction additive is a pervoskite-spinel NOx reduction additive.

45. The process of Claim 32 wherein the additional $NO_x$ reduction additive is a hydrotalcite containing composition.

46. The process of Claim 32 wherein the additional $NO_x$ reduction composition comprises (i) an acidic metal oxide, (ii) cerium oxide, (iii) a lanthanide oxide other than ceria, and (iv) optionally, at least one oxide of a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

47. The process of Claim 3 wherein the particulate $NO_x$ reduction composition has a mean particle size from about 50 to about 200 μm.

48. The process of Claim 47 wherein the particulate $NO_x$ reduction composition has a mean particle size from about 55 to about 150 μm.

49. The process of Claim 1 or 2 wherein the particulate $NO_x$ reduction composition has a Davison attrition index (DI) value of less than 50.

50. The process of Claim 49 wherein the particulate $NO_x$ reduction composition has a DI value of less than 20.

51. The process of Claim 50 wherein the particulate $NO_x$ reduction composition has a DI value of less than 15.

52. The process of Claim 2 wherein the amount of the catalyst/additive composition in the catalyst inventory is that amount sufficient to provide a ratio of $NO_x$ reduction zeolite component to Y-type zeolite in the total catalyst inventory of less than 2.

53. The process of Claim 52 wherein the ratio of $NO_x$ reduction zeolite component to Y-type zeolite in the total catalyst inventory is less than 1.

54. The process of Claim 2 wherein step (b) is accomplished without a substantial change in the hydrocarbon feedstock conversion or yield of cracked hydrocarbons as compared to the hydrocarbon feedstock conversion or yield of cracked hydrocarbons obtained from the cracking catalyst alone.

55. A fluid cracking catalyst (FCC) composition, which composition comprises (a) a FCC cracking component suitable for catalyzing the cracking of hydrocarbons under FCC conditions, and (b) a particulate $NO_x$ reduction catalyst/additive composition having a mean particle size of greater than 45 μm and comprising (i) at least 10 weight percent of $NO_x$ reduction zeolite component selected from the group consisting of ZSM-11, beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, MCM-35, MCM-61, Offretite, A, ZSM-12, ZSM-23, ZSM-18, ZSM-22, ZSM-57, ZSM-61, ZK-5, NaJ, Nu-87, Cit-1, SSZ-35, SSZ-48, SSZ-44, SSZ-23, Dachiardite, Merlinoite, Lovdarite, Levyne, Laumontite, Epistilbite, Gmelonite, Gismondine, Cancrinite, Brewsterite, Stilbite, Paulingite, Goosecreekite, Natrolite, omega or mixtures thereof, and (ii) about 5 to about 50 weight percent of an inorganic binder selected from the group consisting of alumina, silica, silica alumina, alumina phosphate, and mixtures thereof.

56. The catalyst of Claim 55 wherein the FCC cracking component contains a Y-type zeolite.

57. The catalyst of Claim 56 wherein the catalyst/additive composition is present in the total catalyst inventory in an amount sufficient to provide a ratio of $NO_x$ reduction zeolite component to Y-type zeolite of less than 2.

58. The catalyst of Claim 55 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 30 weight percent of the composition.

59. The catalyst of Claim 58 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 40 weight percent of the composition.

60. The catalyst of Claim 59 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition is at least 50 weight percent of the composition.

61. The catalyst of Claim 55 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 10 to about 85 weight percent of the composition.

62. The catalyst of Claim 61 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 30 to about 80 weight percent of the composition.

63. The catalyst of Claim 62 wherein the amount of $NO_x$ reduction zeolite component present in the catalyst/additive composition ranges from about 40 to about 75 weight percent of the composition.

64. The catalyst of Claim 55 wherein the $NO_x$ reduction zeolite component is exchanged with a cation selected from the group consisting of hydrogen, ammonium, alkali metal and combinations thereof.

65. The catalyst of Claim 55 wherein the $NO_x$ reduction zeolite component further comprises at least one stabilizing metal.

66. The catalyst of Claim 65 wherein the stabilizing metal is a metal selected from the group consisting of Groups 2A, 3B, 4B, 5B, 6B, 7B, 8B, 2B, 3A, 4A, 5A and the Lanthanide Series of The Periodic Table, Ag and mixtures thereof.

67. The catalyst of Claim 66 wherein the stabilizing metal is selected from the group consisting of Groups 3B, 2A, 2B, 3A and the Lanthanide Series of the Periodic Table, and mixtures thereof.

68. The catalyst of Claim 67 wherein the stabilizing metal is selected from the group consisting of lanthanum, aluminum, magnesium and zinc, and mixtures thereof.

69. The catalyst of Claim 65 wherein the stabilizing metal is incorporated into the pores of the $NO_x$ reduction zeolite component.

70. The catalyst of Claim 55 wherein the inorganic binder in the particulate catalyst/additive composition is selected from the group consisting of silica, alumina, silica alumina and mixtures thereof.

71. The catalyst of Claim 70 wherein the inorganic binder is alumina.

72. The catalyst of Claim 71 wherein the inorganic binder is an aluminum chlorohydrol.

73. The catalyst of Claim 71 wherein the alumina is an acid or base peptized alumina.

74. The catalyst of Claim 55 wherein the amount of inorganic binder present in the particulate catalyst/additive composition ranges from about 10 to about 30 weight percent of the composition.

75. The catalyst of Claim 74 wherein the amount of inorganic binder present in the particulate catalyst/additive composition ranges from about 15 to about 25 weight percent of the composition.

76. The catalyst of Claim 55 wherein the $NO_x$ reduction zeolite component is selected from the group consisting of beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, Offretite, A, ZSM-12, ZSM-23, omega and mixtures thereof.

77. The catalyst of Claim 55 wherein the $NO_x$ reduction zeolite component has a $SiO_2$ to $Al_2O_3$ molar ratio of less than 500.

78. The catalyst of Claim 55 wherein the particulate catalyst/additive composition further comprises a zeolite other than the $NO_x$ reduction zeolite component .

79. The catalyst of Claim 78 wherein the other zeolite is a zeolite selected from the group selected from ferrierite, ZSM-5, ZSM-35 and mixtures thereof. .

80. The catalyst of Claim 78 wherein the other zeolite is present in an amount ranging from about 1 to about 80 weight percent of the composition.

81. The catalyst of Claim 80 wherein the other zeolite is present in an amount ranging from about 10 to about 70 weight percent of the composition.

82. The catalyst of Claim 55 wherein the composition further comprises a matrix material selected from the group consisting of alumina, silica, silica alumina, titania, zirconia, yttria, lanthana, ceria, neodymia, samaria, europia, gadolinia, praseodymia and mixtures thereof.

83. The catalyst of Claim 82 wherein the matrix material is present in an amount less than 70 weight percent.

84. The catalyst of Claim 55 further comprising at least one additional $NO_x$ reduction composition.

85. The catalyst of Claim 84 wherein the additional $NO_x$ reduction composition is a non-zeolitic composition.

86. The catalyst of Claim 85 wherein the additional $NO_x$ reduction composition comprises (a) an acidic metal oxide containing substantially no zeolite; (b) a metal component, measured as the oxide, selected from the group consisting of an alkali metal, an alkaline earth metal and mixtures thereof; (c) an oxygen storage metal oxide component; and, (d) at least one noble metal component.

87. The catalyst of Claim 84 wherein the additional $NO_x$ reduction composition comprises (a) an acidic metal oxide support; (b) an alkali metal, alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and, (d) a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

88. The catalyst of Claim 84 wherein the additional $NO_x$ reduction composition comprises (a) an acidic oxide support; (b) an alkali metal, an alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and (d) palladium.

89. The catalyst of Claim 84 wherein the additional $NO_x$ reduction composition comprises at least one metal-containing spinel which includes a first metal and a second metal having a valence higher than the valence of said first metal, at least one component of a third metal other than said first and second metals and at least one component of a fourth metal other than said first, second and third metals, wherein said third metal is selected from the group consisting of Group IB metals, Group IIB metals, Group VIA metals, the rare-earth metals, the Platinum Group metals and mixtures thereof, and said fourth metal is selected from the group consisting of iron, nickel, titanium, chromium, manganese, cobalt, germanium, tin, bismuth, molybdenum, antimony, vanadium and mixtures thereof.

90. The catalyst of Claim 89 wherein the metal containing spinel comprises magnesium as said first metal and aluminum as said second metal.

91. The catalyst of Claim 89 wherein the third metal component in the metal containing spinel is selected from the group consisting of a Platinum Group metal, the rare-earth metals and mixtures thereof.

92. The catalyst of Claim 89 wherein the third metal component is present in an amount in the range of about 0.001 to about 20 weight percent, calculated as elemental third metal.

93. The catalyst of Claim 89 wherein said fourth metal component is present in an amount in the range of about 0.001 to about 10 weight percent, calculated as elemental fourth metal.

94. The catalyst of Claim 84 wherein the additional $NO_x$ reduction additive is a zinc based catalyst.

95. The catalyst of Claim 84 wherein the additional $NO_x$ reduction additive is an antimony based $NO_x$ reduction additive.

96. The catalyst of Claim 84 wherein the additional $NO_x$ reduction additive is a pervoskite-spinel $NO_x$ reduction additive.

97. The catalyst of Claim 84 wherein the additional $NO_x$ reduction additive is a hydrotalcite containing composition.

98. The catalyst of Claim 55 wherein the particulate catalyst/additive composition has a mean particle size from about 50 to about 200 μm.

99. The catalyst of Claim 98 wherein the particulate catalyst/additive composition has a mean particle size from about 55 to about 150 μm.

100. The catalyst of Claim 55 wherein the particulate catalyst/additive composition has a Davison attrition index (DI) value of less than 50.

101. The catalyst of Claim 100 wherein the particulate catalyst/additive composition has a DI value of less than 20.

102. The catalyst of Claim 101 wherein the particulate catalyst/additive composition has a DI value of less than 15.

103. The catalyst of Claim 84 wherein the additional $NO_x$ reduction composition comprises (i) an acidic metal oxide, (ii) cerium oxide, (iii) a lanthanide oxide other than ceria, and (iv) optionally, at least one oxide of a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

104. The catalyst of Claim 55 wherein the ratio of $NO_x$ reduction zeolite component to Y-type zeolite in the total catalyst inventory is less than 1.

105. A method of reducing $NO_x$ emissions from the regeneration zone during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components, said method comprising contacting a hydrocarbon feedstock with a cracking catalyst at elevated temperature whereby lower molecular weight hydrocarbon components are formed, said cracking catalyst comprising the composition of Claim 55, 56, 57 or 84.

106. The method of Claim 105 further comprising recovering the cracking catalyst from said contacting step and treating the used catalyst in a regeneration zone to regenerate said catalyst.

107. The method of Claim 106 wherein the cracking catalyst is fluidized during contacting said hydrocarbon feedstock.

108. A fluid cracking catalyst comprising (a) a cracking component suitable for catalyzing the cracking of hydrocarbons and (b) 0.1 weight percent of a NOx reduction zeolite selected from the group consisting ZSM-11, beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, MCM-35, MCM-61, Offretite, A, ZSM-12, ZSM-23, ZSM-18, ZSM-22, ZSM-57, ZSM-61, ZK-5, NaJ, Nu-87, Cit-1, SSZ-35, SSZ-48, SSZ-44, SSZ-23, Dachiardite, Merlinoite, Lovdarite, Levyne, Laumontite, Epistilbite, Gmelonite, Gismondine, Cancrinite, Brewsterite, Stilbite, Paulingite, Goosecreekite, Natrolite, omega or mixtures thereof.

109. The cracking catalyst of Claim 108 wherein said catalyst comprises integral particles which contain both components (a) and (b).

110. The cracking catalyst of Claim 108 wherein component (b) comprises from about 0.1 to about 60 wt % of the cracking catalyst.

111. The cracking catalyst of Claim 110 wherein component (b) comprises from about 1 to about 40 wt % of the cracking catalyst.

112. The catalyst of Claim 108 further comprising at least one additional $NO_x$ reduction composition.

113. The catalyst of Claim 112 wherein the additional $NO_x$ reduction composition is a non-zeolitic composition.

114. The catalyst of Claim 113 wherein the additional $NO_x$ reduction composition comprises (a) an acidic metal oxide containing substantially no zeolite; (b) a metal component, measured as the oxide, selected from the group consisting of an alkali metal, an alkaline earth metal and mixtures thereof; (c) an oxygen storage metal oxide component; and (d) at least one noble metal component.

115. The catalyst of Claim 112 wherein the additional $NO_x$ reduction composition comprises (a) an acidic metal oxide support; (b) an alkali metal, alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and, (d) a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

116. The catalyst of Claim 112 wherein the additional $NO_x$ reduction composition comprises (a) an acidic oxide support; (b) an alkali metal, an alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and (d) palladium.

117. The catalyst of Claim 112 wherein the additional $NO_x$ reduction composition comprises at least one metal-containing spinel which includes a first metal and a second metal having a valence higher than the valence of said first metal, at least one component of a third metal other than said first and second metals and at least one component of a fourth metal other than said first, second and third metals, wherein said third metal is selected from the group consisting of Group IB metals, Group IIB metals, Group VIA metals, the rare-earth metals, the Platinum Group metals and mixtures thereof, and said fourth metal is selected from the group consisting of iron, nickel, titanium, chromium, manganese, cobalt, germanium, tin, bismuth, molybdenum, antimony, vanadium and mixtures thereof.

118. The catalyst of Claim 117 wherein the metal containing spinel comprises magnesium as said first metal and aluminum as said second metal.

119. The catalyst of Claim 117 wherein the third metal component in the metal containing spinel is selected from the group consisting of a Platinum Group metal, the rare-earth metals and mixtures thereof.

120. The catalyst of Claim 117 wherein the third metal component is present in an amount in the range of about 0.001 to about 20 weight percent, calculated as elemental third metal.

121. The catalyst of Claim 117 wherein said fourth metal component is present in an amount in the range of about 0.001 to about 10 weight percent, calculated as elemental fourth metal.

122. The catalyst of Claim 112 wherein the additional $NO_x$ reduction additive is a zinc based catalyst.

123. The catalyst of Claim 112 wherein the additional $NO_x$ reduction additive is an antimony based $NO_x$ reduction additive.

124. The catalyst of Claim 112 wherein the additional $NO_x$ reduction additive is a pervoskite-spinel $NO_x$ reduction additive.

125. The catalyst of Claim 112 wherein the additional $NO_x$ reduction additive is a hydrotalcite containing composition.

126. A method of reducing $NO_x$ emissions from the regeneration zone during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components, said process comprising (a) contacting a hydrocarbon feedstock during a fluid catalytic cracking (FCC) process wherein $NO_x$ emissions are released from a regeneration zone of the FCCU operating under FCC conditions with an FCC cracking catalyst composition of Claim 108; and (b) reducing the amount of $NO_x$ emissions released from the regeneration zone of the FCCU by at least 10 percent as compared to the amount of $NO_x$ emissions released in the absence of the $NO_x$ reduction composition.

127. The method of Claim 126 wherein step (b) is accomplished without a substantial change in the hydrocarbon feedstock conversion or yield of cracked hydrocarbons obtained during the FCC process as compared to the hydrocarbon feedstock conversion or yield of cracked hydrocarbons obtained from the cracking catalyst alone.

128. The method of Claim 126 or 127 wherein the amount of $NO_x$ reduction zeolite present in the cracking catalyst composition comprises at least about 0.1 wt % of the cracking catalyst composition.

129. The method of Claim 126 or 127 wherein the amount of $NO_x$ reduction zeolite present in the cracking catalyst composition ranges from about 0.1 to about 60 wt % of the cracking catalyst composition.

130. The method of Claim 129 wherein the amount of $NO_x$ reduction zeolite present in the cracking catalyst composition ranges from about 1 to about 40 wt % of the cracking catalyst composition.

131. The method of Claim 126 or 127 wherein the $NO_x$ reduction zeolite is exchanged with a cation selected from the group consisting of hydrogen, ammonium, alkali metal and combinations thereof.

132. The method of Claim 126 or 127 wherein the $NO_x$ reduction zeolite further comprises at least one stabilizing metal.

133. The method of Claim 132 wherein the stabilizing metal is a metal selected from the group consisting of Groups 2A, 3B, 4B, 5B, 6B, 7B, 8B, 2B, 3A, 4A, 5A the Lanthanide Series of The Periodic Table, Ag and mixtures thereof.

134. The method of Claim 133 wherein the stabilizing metal is selected from the group consisting of Groups 3B, 2A, 2B, 3A and the Lanthanide Series of the Periodic Table, and mixtures thereof.

135. The method of Claim 134 wherein the stabilizing metal is selected from the group consisting of lanthanum, aluminum, magnesium and zinc, and mixtures thereof.

136. The method of Claim 132 wherein the stabilizing metal is incorporated into the pores of the $NO_x$ reduction zeolite.

137. The method of Claim 126 or 127 further comprising recovering the cracking catalyst and treating the used catalyst in a regeneration zone to regenerate said catalyst.

138. The method of Claim 126 or 127 wherein the cracking catalyst is fluidized during contacting said hydrocarbon feedstock.

139. The method of Claim 104 or 126 further comprising contacting the hydrocarbon feed with at least one additional $NO_x$ reduction additive composition.

140. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition is a non-zeolitic composition.

141. The method of Claim 140 wherein the additional $NO_x$ reduction additive composition comprises (a) an acidic metal oxide containing substantially no zeolite; (b) a metal component, measured as the oxide, selected from the group consisting of an alkali metal, an alkaline earth metal and mixtures thereof; (c) an oxygen storage metal oxide component; and (d) at least one noble metal component.

142. The method of Claim 139 wherein the $NO_x$ reduction additive composition is a low $NO_x$, combustion promoter composition which comprises (a) an acidic oxide support; (b) an alkali metal and/or alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and (d) palladium.

143. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition comprises at least one metal-containing spinel which includes a first metal and a second metal having a valence higher than the valence of said first metal, at least one component of a third metal other than said first and second metals and at least one component of a fourth metal other than said first, second and third metals, wherein said third metal is selected from the group consisting of Group IB metals, Group IIB metals, Group VIA metals, the rare-earth metals, the Platinum Group metals, and mixtures thereof, and said fourth metal is selected from the group consisting of iron, nickel, titanium, chromium, manganese, cobalt, germanium, tin, bismuth, molybdenum, antimony, vanadium and mixtures thereof.

144. The method of Claim 143 wherein the metal-containing spinel comprises magnesium as said first metal and aluminum as said second metal.

145. The method of Claim 143 wherein the third metal component in the metal-containing spinel is selected from the group consisting of a Platinum Group metal, the rare-earth metals and mixtures thereof.

146. The method of Claim 143 wherein the third metal component is present in an amount in the range of about 0.001 to about 20 weight percent, calculated as elemental third metal.

147. The method of Claim 143 wherein said fourth metal component is present in an amount in the range of about 0.001 to about 10 weight percent, calculated as elemental fourth metal.

148. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition comprises (a) an acidic oxide support; (b) an alkali metal and/or alkaline earth metal or mixtures thereof; (c) a transition metal oxide having oxygen storage capability; and (d) a transition metal selected from the Groups IB and IIB of the Periodic Table.

149. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition is a zinc based catalyst.

150. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition is an antimony based $NO_x$ reduction additive.

151. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition is a pervoskite-spinel $NO_x$ reduction additive.

152. The method of Claim 139 wherein the additional $NO_x$ reduction additive composition is a hydrotalcite containing composition.

153. The cracking catalyst of Claim 108 wherein component (a) comprises a Y-type zeolite and component (b) is present in an amount sufficient to provide a ratio of $NO_x$ reduction zeolite to Y-type zeolite of less than 2 in the total catalyst.

154. The cracking catalyst of Claim 153 wherein component (b) is present in an amount sufficient to provide a ratio of $NO_x$ reduction zeolite to Y-type zeolite of less than 1 in the total catalyst.

155. The cracking catalyst of Claim 108 wherein component (b) further comprises at least one stabilizing metal.

156. The cracking catalyst of Claim 155 wherein the stabilizing metal is a metal selected from the group consisting of Groups 2A, 3B, 4B, 5B, 6B, 7B, 8B, 2B, 3A, 4A, 5A and the Lanthanide Series of The Periodic Table, Ag and mixtures thereof.

157. The cracking catalyst of Claim 156 wherein the stabilizing metal is selected from the group consisting of Groups 3B, 2A, 2B, 3A and the Lanthanide Series of the Periodic Table, and mixtures thereof.

158. The cracking catalyst of Claim 157 wherein the stabilizing metal is selected from the group consisting of lanthanum, aluminum, magnesium and zinc, and mixtures thereof.

159. The cracking catalyst of Claim 155 wherein the stabilizing metal is incorporated into the pores of component (b).

160. The cracking catalyst of Claim 112 wherein the additional $NO_x$ reduction composition comprises (i) an acidic metal oxide, (ii) cerium oxide, (iii) a lanthanide oxide other than ceria, and (iv) optionally, at least one oxide of a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.

161. The cracking catalyst of Claim 163 wherein the $NO_x$ reduction zeolite is selected from the group consisting of beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, Offretite, A, ZSM-12, ZSM-23, omega and mixtures thereof.

162. The cracking catalyst of Claim 108 wherein the $NO_x$ reduction zeolite has a $SiO_2$ to $Al_2O_3$ molar ratio of less than 500.

163. The cracking catalyst of Claim 108 further comprising a zeolite other than the $NO_x$ reduction zeolite.

164. The cracking catalyst of Claim 163 wherein the other zeolite is selected from the group consisting of ferrierite, ZSM-5, ZSM-35 and mixtures thereof.

165. The cracking catalyst of Claim 163 or 164 wherein the other zeolite is present in an amount ranging from about 1 to about 80 weight percent of the composition.

166. The cracking catalyst of Claim 165 wherein the other zeolite is present in an amount ranging from about 10 to about 70 weight percent of the composition.

167. The cracking catalyst of Claim 108 wherein the $NO_x$ reduction zeolite is selected from the group consisting of beta, MCM-49, mordenite, MCM-56, Zeolite-L, zeolite Rho, errionite, chabazite, clinoptilolite, MCM-22, Offretite, A, ZSM-12, ZSM-23, omega and mixtures thereof.

168. The method of Claim 139 wherein the additional $NO_x$ reduction composition comprises (i) an acidic metal oxide, (ii) cerium oxide, (iii) a lanthanide oxide other than ceria, and (iv) optionally, at least one oxide of a transition metal selected from Groups IB and IIB of the Periodic Table, and mixtures thereof.